State Notes

TOPICS OF LEGISLATIVE INTEREST

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A Renewable Portfolio Standard for Michigan
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According to a report by the Public Service Commission (PSC), *Michigan's 21st Century Electric Energy Plan* (January 2007), the State's demand for electricity is anticipated to grow by approximately 1.3% per year over the next 20 years, and will necessitate the construction of additional baseload generation in the future. The need for new generation has stimulated discussion regarding the ideal fuel for the State's electric requirements. Concerns about pollution, energy prices, and the limits of the fossil fuel supply have led some to consider a greater reliance on renewable energy sources, such as wind, sunlight, and biomass. It has been suggested that one way to decrease dependence on fossil fuels would be to require that a certain percentage of the energy produced in the State come from renewable resources. To date, 24 states and Washington, D.C. have enacted some form of renewable portfolio standard, or RPS. This article examines the debate surrounding whether an RPS is right for Michigan.

Energy Prices

According to the *21st Century Plan*, a significant amount of the power generated in Michigan comes from coal, natural gas, and nuclear energy, while only 3.0% comes from renewable resources. Renewable portfolio standard advocates assert that a more diverse mix of fuels, particularly those indigenous to Michigan, would reduce the overall cost of electricity and provide some protection against price fluctuations.

First, energy sources such as wind and solar power are free, while coal, natural gas, and uranium necessarily carry a cost. Furthermore, nearly all of the fossil fuels used currently in Michigan power plants must be imported from other states and countries, which adds to the cost. According to RPS proponents, over time, increased use of in-State, renewable fuel would result in lower costs to consumers. Additionally, price spikes at peak demand times or due to shortages of traditional fossil fuels would be mitigated.

Environmental Concerns

Another argument in favor of an RPS is that renewable fuels would reduce emissions of pollutants and greenhouse gases, resulting in fewer environmental consequences and health problems.

Many argue that shifting to a greater reliance on renewable energy sources also would mitigate increases in the cost of energy due to measures to reduce pollution from fossil fuels enacted in the future, such as a carbon tax, pollution permits, or a requirement for carbon capture equipment.

Economic Development

Proponents of an RPS emphasize Michigan's strong traditions of manufacturing and agriculture, and tout the thousands of jobs that could be created to provide raw materials, manufacture components of renewable energy generation facilities, and construct and

operate those facilities. In addition to providing jobs, such facilities would generate increased tax revenue to local governments.

Some, however, question the need to impose a government mandate on utilities to produce a certain percentage of electricity by using renewable fuels. They note that, despite the absence of an RPS, John Deere Wind Energy has begun construction of the Harvest Wind Farm, which will produce enough electricity for more than 15,000 homes. Wolverine Power has signed a 20-year purchase agreement with the wind farm, which is located in Huron County. The project is projected to save Michiganders $4.0 billion over the length of the agreement.

Those who support a renewable portfolio standard counter that it would guarantee a market in the State for prospective investors in the alternative energy industry and related industries, and point to the success of other states in attracting businesses via an RPS. Additionally, proponents say, the RPS would be fair because it would allow each provider to determine how it would meet the standard, and would stimulate competition and lower prices. They caution, however, that a mandate should be practical and phased in slowly to protect consumers from dramatic rate hikes due to increased demand for certain renewable resources.

Michigan's Renewable Potential

There are several renewable resources that could be used to meet an RPS, each with benefits and challenges. Some have identified wind as a possibility, noting that Michigan is the 14th windiest state in the country. One drawback is that wind is less abundant during the summer months, when demand and electricity prices are high. It has been pointed out that turbines could be placed in the Great Lakes to harness the added wind power off-shore, although the development of off-shore technology currently is not as advanced as the technology for land-based turbines. Some people are concerned that birds and bats can be killed by the blades of wind turbines. Some find wind turbines noisy and visually unappealing, and worry that their property values could be affected. In order to address those concerns, the turbines, which require a significant amount of land, could be erected on farmland, away from neighboring residents. Farmers could continue to plant crops on the land while also receiving money for leasing it to energy producers.

Solar energy, like wind, is available intermittently, but also is most available during peak demand times. The equipment needed to harness the sun's power can be expensive, however, and, to meet an RPS requirement, would require extensive land and rooftop areas. Although the cost appears to be coming down, it most likely will be some time before solar power is a practical choice for most residents.

Another option is biomass, or agricultural crops, residue, and waste generated from the production and processing of agricultural products, food processing waste, animal waste, and landfill gas. The generation of energy from biomass creates an additional value-added market for crops, creates a market for various byproducts that otherwise would be considered waste, and reduces the amount of greenhouse gases released into the

atmosphere. While the sources of biomass are plentiful in Michigan, development of their applications thus far has been focused more on transportation than on electric generation.

Another resource that also is considered renewable is water, which already has been used to generate electricity for many years. According to the Energy Information Administration of the U.S. Department of Energy, hydroelectric power accounted for 7.0% of total U.S. electricity generation and 73.0% of generation from renewable resources in 2005. Hydroelectric generation is relatively inexpensive, does not result in waste, and does not produce pollution. A drawback is that the infrastructure can have a detrimental impact on aquatic life and habitat, although measures can be taken to diminish any negative effects.

Those who support a mandatory RPS note that it is unlikely that one renewable source could meet all of the State's energy needs, but that a mix of resources should be used.

RPS Details

Some contend that, while an RPS is a good idea, the particulars of the standard must take into account various factors in order for it to be successful. While several other states have enacted aggressive standards, it is unclear whether such an aggressive standard would be appropriate in Michigan. The specific renewable assets available in the State must be considered. The time line for attaining a specific standard should allow for the processing of interconnection requests, the issuance of permits, and the performance of necessary transmission and distribution system upgrades. Additionally, land use and zoning statutes and ordinances could affect the amount of time needed to reach a certain percentage of renewable energy. Some have suggested that the Customer Choice and Electricity Reliability Act should be examined for potential reforms in order to provide more certainty for investors.

State Legislation

Several proposals to establish an RPS for Michigan have been introduced in the Legislature during the 2007-2008 session. Senate Bill 385 and House Bill 4539 would require the PSC to set an RPS for each electric service provider, and require the RPS to be at least 20.0% by 2021. Senate Bill 213 and House Bill 4562 would require each provider to set an RPS, and require the RPS to be at least 10.0% by 2016. Senate Bill 219 and House Bill 4319 would require the PSC to set an RPS for each provider, and require the RPS to be at least 7.0% by 2015. All of the bills would allow a provider to meet the RPS either by generating or acquiring renewable energy, or by acquiring renewable energy "credits" from a renewable energy system. The bills also would require the PSC to impose a fine on a provider that did not meet the standard. Additionally, Senate Bill 385 and House Bill 4539 would require the fine money to be deposited into a public benefits fund for the promotion and growth of renewable energy generation.

The Senate bills have been referred to the Senate Committee on Energy Policy and Public Utilities. The House bills have been referred to the House Committee on Energy and Technology.[1]

Federal Legislation

Several proposals for renewable portfolio standards have been introduced in the U.S. Congress. Thus far, the measure that has advanced is H.R. 3221, which would create the Renewable Energy and Energy Conservation Tax Act of 2007. The bill would establish an RPS of 15.0% by 2020 and thereafter through 2039, and would allow the use of credits to meet the standard. The House of Representatives passed the legislation on August 8, 2007.

[1] The prime sponsors of Senate Bills 213, 219, and 385 are, respectively, Senators Patricia L. Birkholz, Roger Kahn, and Jim Barcia. The prime sponsors of House Bills 4319, 4539, and 4562 are, respectively, Representatives Howard Walker, Robert Jones, and Frank Accavatti.